UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,754	04/30/2001	Petr Peterka	GIC-561	1932

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EXAMINER
LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary

<table>
<tr><td>Examiner</td><td>Art Unit</td><td></td></tr>
<tr><td>Hunter B. Lonsberry</td><td>2611</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 June 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/9/05 have been fully considered but they are not persuasive.

Applicant argues that Menand fails to disclose a registry package for storing objects that represent the resources (response pages 8-9).

Regarding applicant's argument, Menand discloses that an API provides a resource package for registering the available resources at the terminal (column 5, lines 2-10, 33-40), a management package for managing states of the resources (event manager, column 5, lines 22-31, 35-40), and a registry package for storing objects that represent the resources (software kernel with interacts with drivers, column 5, lines 31-column 6, line 2).

The Microsoft Computer dictionary defines a registry as "*a central hierarchical data base used in windows 9x, windows CE windows NT and windows 2000 which is used to store information necessary top configure the system for one or more users, applications and hardware devices. The registry contains information that windows continually references during operation, such as profiles for each user, the applications installed on the computer, and the types of documents each can create, property sheet settings for folders and application icons, what hardware exists on the system and which ports are being used.*

The Microsoft Computer dictionary defines a device driver as *"A software component that permits a computer system to communicate with a device."*

The Microsoft Computer dictionary defines a kernel as *"The core of an operating system-the portion of the system that manages memory, files and peripheral devices, maintains the time and date, launches applications and allocates system resources."*

As Menand discloses that the resources and devices are registered with the terminal, drivers are a software object that provide a conduit with which each hardware resource is communicated with, and that the kernel interacts with the drivers, Menand does teach the use of a registry package for storing objects that represent the resources (drivers referenced by a registry).

Applicant traverses the official notice taken in claims 2 and 11 (response page 10).

The examiner has provided a copy of the ITU-T X.731 specification, which discloses alarm states, locked and unlocked states.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1, 3-4, 7-10, 12-17 and 20 rejected under 35 U.S.C. 102(b) as being

anticipated by U.S. Patent 5,563,648 to Menand.

Regarding claims 1 and 20, Menand discloses a television set-top terminal

(figure 1/2), comprising:

a computer readable medium having computer program code means (RAM 412,

ROM 414, column 4, lines 50-61) ; and

means for executing said computer program code means CPU 410 (column 4,

line 62-column 5, line 10) to implement an Application Programming Interface (API) for

accessing and managing multiple resources at the terminal, wherein:

the API provides a resource package for registering the available resources at

the terminal (column 5, lines 2-10, 33-40), a management package for managing states

of the resources (event manager, column 5, lines 22-31, 35-40), and a registry package

for storing objects that represent the resources (software kernel with interacts with

drivers, column 5, lines 31-column 6, line 2).

Regarding claim 3, Menand discloses that the available resources include a

modem 426 (column 5, lines 32-37).

Regarding claim 4, Menand discloses a terminal with an API:

the API provides a resource registry for maintaining a record of resource

managers that provide access to individual resources (figure 5, column 11, lines 13-47).

Regarding claim 7, Menand discloses that the API monitors the behavior of the

resources and attaches management information to the resources (column 11, lines 27-

42). The API in conjunction with the wait manager determines what resources a receiver

has, what resources an application requires, and if the receiver has determined a free

resource is available, it then may execute the application.

Regarding claims 8-9, 12, and 15, Menand discloses in Figure 5, step 56, that

the available resources indicate their availability to the event manager which in turn may

be called by an API for a requesting application (column 11, lines 27-42). By indicating

their availability, each resource must inform the application and API if they are in use or

not by another application, otherwise the API would be unable to determine if they have

been allocated.

Regarding claims 13-14, and 16, Menand discloses in Figure 5, step 56, that the

available resources indicate their availability to the event manager which in turn may be

called by an API for a requesting application (column 11, lines 27-42). Resources are

tracked to see if they have been allocated (column 12, line 62-column 13, line 7, column

15, lines 5-7). By indicating their availability and therefore their status, each resource

must inform the application and API if they are in use or not by another application, otherwise the API would be unable to determine if they have been allocated.

Regarding claim 17, Menand discloses that the terminal may run an application, which is an interactive program or commercial (column 6, lines 3-14, column 12, lines 7-24), and is received via the AVI signal (column 4, lines 53-61, figure 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,563,648 to Menand in view of the ITU-T X.731 specification.

Regarding claim 2, Menand discloses the use of APIs to interact with hardware and software (column 4, line 62-column 5, line 10), which may include a wide variety of CPUs with different instruction sets from different manufacturers.

ITU-T X.731 discloses a state management standard that makes use of a number of different status states, locked and unlocked states which allow a resource to be used or reserved by different applications (pages 5-12).

Therefore, it would have been obvious to one skilled in the art at the time of
invention to modify Menand to utilize an ITU-T X.731 compatible management function,
thus informing an application as to the states of each resource and ensuring that an
application may reserve a resource.

Regarding claim 11, Menand discloses the use of APIs to interact with hardware
and software (column 4, line 62-column 5, line 10).

Menand fails to disclose advertising alarm statuses to an application.

ITU-T X.731 discloses an alarm status (pages 14-15) which allows the system to
recognize if a resource is having a difficulty, the severity of the problem and if the
resource is under repair, thus allowing the system to recognize an abnormal condition,
which may result in errors.

Therefore, it would have been obvious to one skilled in the art at the time of
invention to modify Menand to allow resources to advertise an alarm condition as taught
by ITU-T X.731, for the advantage of enabling applications to recognize that there is an
abnormal condition, which may result in an error in the application.

4.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.
Patent 5,563,648 to Menand in view of U.S. Patent 6,026,403 to Arda.

Regarding claim 5, Menand discloses the use of APIs to interact with hardware
and software (column 4, line 62-column 5, line 10), which may include a wide variety of
CPUs with different instruction sets from different manufacturers.

Menand fails to disclose if the API is independent of an operating system and hardware of the terminal.

Arda disclose the use of Java API's which are platform independent and provide application developers with a framework for reusable, embeddable, modular software components which may exist on different types of servers, such as IBM and Sun servers (column 1, lines 23-40), thus enabling the use of a common set of APIs on variety of different platforms and reducing the need for platform specific implementations.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Menand to utilize a JAVA API as taught by Arda, thus enabling the use of a common set of APIs on variety of different platforms and reducing the need for platform specific implementations.

5.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,563,648 to Menand in view of U.S. Patent 6,310,949 to Taylor.

Regarding claim 6, Menand discloses a terminal with an API and that the API provides a resource registry for maintaining a record of resource managers that provide access to individual resources (figure 5, column 11, lines 13-47).

Menand does not disclose if the API group's resources of the same type and manages the grouped resources as a group.

Taylor discloses in figure 1, a number of applications 12n which interface with APIs 11n, the API manages a number of resources 16-20 grouped by type, each of

which is handled by its respective handler process 16-20H (column 5, lines 9-19, 39-46)
thus increasing efficiency by grouping resources together.

Therefore, it would have been obvious to one skilled in the art at the time of
invention to modify Menand to utilize the resource management grouping of Taylor, thus
increasing efficiency by grouping resources together.

6.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.
Patent 5,563,648 to Menand in view of U.S. Patent 5,699,500 to Dasgupta.

Regarding claim 10, Menand discloses the use of APIs to interact with hardware
and software (column 4, line 62-column 5, line 10).

Menand does not disclose if the API enables administrative locking and
unlocking of resources.

Dasgupta discloses lock management in which a distributed lock manager
maintains the lock and unlock status for a number of resources, a lock is established
which enables an application to control a resource, if a node failure occurs, the DLM
unlocks the resources which were held by the dead node (column 3, line 58-column 4,
line 50), thus freeing up resources for other processes to utilize.

Therefore, it would have been obvious to one skilled in the art at the time of
invention to modify Menand to utilize administrative locking and unlocking as taught by
Dasgupta, thus freeing up resources for other processes to utilize if a requesting node
freezes up.

7.   Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent 5,563,648 to Menand in view of U.S. Patent 6,177,931 to Alexander.

Regarding claim 18-19, Menand discloses that the terminal may run an

application, which is an interactive program or commercial (column 6, lines 3-14,

column 12, lines 7-24).

Menand fails to disclose the use of an electronic program guide, which connects

to the Internet.

Alexander discloses the use of an electronic program guide, which enables users

to learn more about an upcoming program, by connecting to the Internet via a browser

(column 17, line 50-column 18, line 12).

Therefore, it would have been obvious to one skilled in the art at the time of

invention to modify Menand to utilize the electronic program guide and Internet

connection of Alexander, thus enabling a user to learn more about a TV program.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-

272-7298. The examiner can normally be reached on Monday-Friday during normal

business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

HBL

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